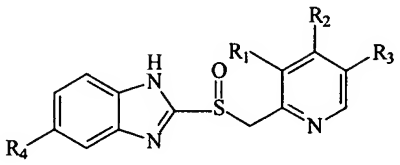
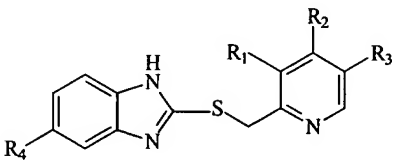
Amendments to the Claims:

1. (currently amended) A process for preparing a thioester compound of formula A:



A

wherein R_1, R_2, and R_4 are each selected from the group consisting of hydrogen, substituted or unsubstituted lower alkyl and substituted lower alkoxy; and R_3 is selected from the group consisting of hydrogen and substituted or unsubstituted lower alkyl, comprising reacting a thioether compound of formula B:



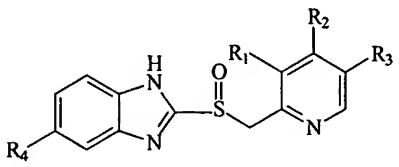
B

wherein R_1 through R_4 are as in formula A, with an oxidizing agent selected from the group consisting of tert-butyl hydroperoxide in the presence of a catalyst, OXONE® and potassium peroxymonosulfate to produce selective oxidation of the thioether compound of formula B to form the thioester compound of formula A.

2. (original) The process according to claim 1, wherein the oxidation is performed at a temperature from about 10°C to about 30°C.

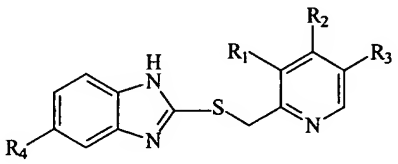
3. (original) The process according to claim 1, wherein the oxidation is performed for about 2 hours to about 10 hours.

4. (currently amended) A process for preparing a thioester compound of formula A:



A

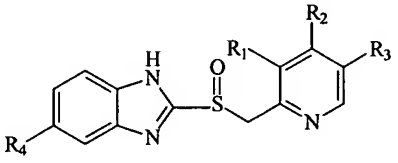
wherein R_1 is methyl, R_2 is methoxy; R_3 is methyl; and R_4 is methoxy, comprising reacting a thioether compound of formula B:



B

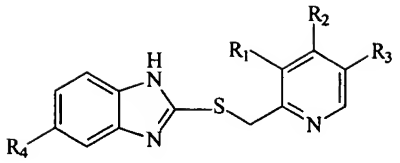
wherein R_1 through R_4 are as in formula A, with an oxidizing agent to produce selective oxidation of the thioether compound of formula B to form the thioester compound of formula A.

5. (currently amended) A process for preparing a thioester compound of formula A:



A

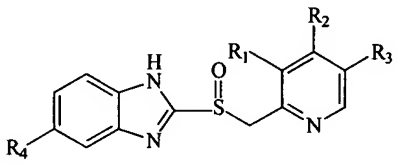
wherein R_1 is methyl; R_2 is 2-trifluoroethoxy; R_3 is hydrogen; and R_4 is hydrogen, comprising reacting a thioether compound of formula B:



B

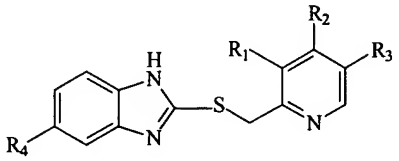
wherein R_1 through R_4 are as in formula A, with an oxidizing agent to produce selective oxidation of the thioether compound of formula B to form the thioester compound of formula A.

6. (currently amended) A process for preparing a thioester compound of formula A:



A

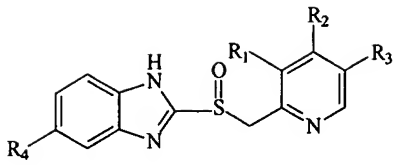
wherein R_1 ~~s~~ is methoxy; R_2 is methoxy; R_3 is hydrogen; and R_4 is difluoromethoxy, comprising reacting a thioether compound of formula B:



B

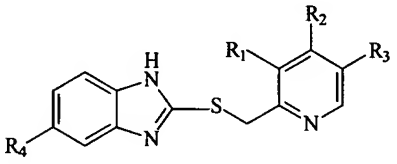
wherein R_1 through R_4 are as in formula A, with an oxidizing agent to produce selective oxidation of the thioether compound of formula B to form the thioester compound of formula A.

7. (currently amended) A process for preparing a thioester compound of formula A:



A

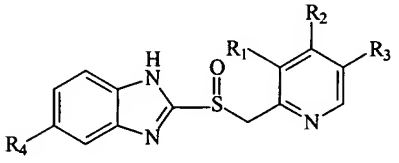
wherein R_1 is methyl; R_2 is $MeOCH_2CH_2CH_2O$; R_3 is hydrogen; and R_4 is hydrogen, comprising reacting a thioether compound of formula B:



B

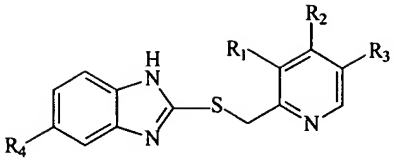
wherein R_1 through R_4 are as in formula A, with an oxidizing agent to produce selective oxidation of the thioether compound of formula B to form the thioester compound of formula A.

8. (currently amended) A process for preparing a thioester compound of formula A:



A

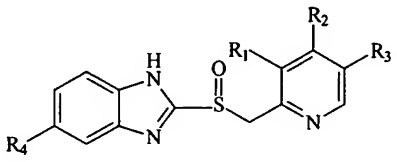
wherein R_1, R_2, and R_4 are each selected from the group consisting of hydrogen, substituted or unsubstituted lower alkyl and substituted lower alkoxy; and R_3 is selected from the group consisting of hydrogen and substituted or unsubstituted lower alkyl ~~alkul~~, comprising reacting a thioether compound of formula B:



B

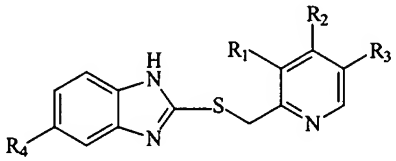
wherein R_1 through R_4 are as in formula A, with tert-butyl hydroperoxide in the presence of a catalyst to produce selective oxidation of the thioether compound of formula B to form the thioester compound of formula A.

9. (currently amended) A process for preparing a thioester compound of formula A:



A

wherein R_1, R_2, and R_4 are each selected from the group consisting of hydrogen, substituted or unsubstituted lower alkyl and substituted lower alkoxy; and R_3 is selected from the group consisting of hydrogen and substituted or unsubstituted lower alkyl, comprising reacting a thioether compound of formula B:



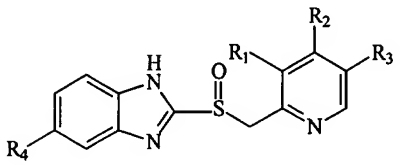
B

wherein R_1 through R_4 are as in formula A, with tert-butyl hydroperoxide in the presence of a catalyst to produce selective oxidation of the thioether compound of formula B to form the thioester compound of formula A, wherein the catalyst is selected from the group consisting of vanadyl bisacetylacetonate, sodium meta-vanadate and vanadium pentoxide.

10. (previously presented) The process according to claim 8, wherein the molar ratio of

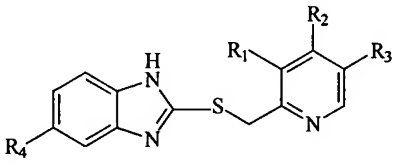
tert-butyl hydroperoxide to the compound of formula B is in the range of about 1.15 to about 4.5.

11. (currently amended) A process for preparing a thioester compound of formula A:



A

wherein R_1, R_2, and R_4 are each selected from the group consisting of hydrogen, substituted or unsubstituted lower alkyl and substituted lower alkoxy; and R_3 is selected from the group consisting of hydrogen and substituted or unsubstituted lower alkyl, comprising reacting a thioether compound of formula B:



B

wherein R_1 through R_4 are as in formula A, with tert-butyl hydroperoxide in the presence of vanadyl bis-acetylacetonate to produce selective oxidation of the thioether compound of formula B to form the thioester compound of formula A.

12. (currently amended) The process of claim 11, wherein the vanadyl bis acetylacetonate and the compound of formula B is in ~~the~~ a molar ratio of about 0.01 to about 0.6.

13. (original) The process according to any one of claims 8-12, wherein the oxidation is performed in an organic solvent.

14. (original) The process according to claim 13, wherein the organic solvent is selected from the group consisting of toluene, lower alkanols and ethyl acetate.

15. (original) The process according to claim 13, wherein the oxidation is performed in an organic solvent in the presence of water.

16. (previously presented) The process according to claim 1, wherein the oxidizing agent is OXONE®.

17. (currently amended) The process according to claim 16, wherein the molar ratio ~~between~~ of OXONE® and the compound of formula B is about 1.25-1.6 to about 1.

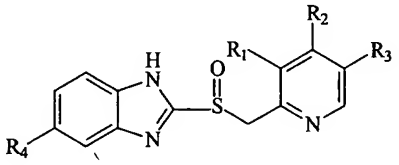
18. (currently amended) The process according to claim 16, wherein the molar ratio ~~between~~ of OXONE® and the compound of formula B is about 1.4-1.6 to about 1.

19. (previously presented) The process according to claim 16, wherein the oxidation is performed in an aqueous organic solvent.

20. (previously presented) The process according to claim 16, wherein the oxidation is performed in the presence of at least one solvent wherein the solvent is selected from the group consisting of acetone, methanol and a mixture thereof.

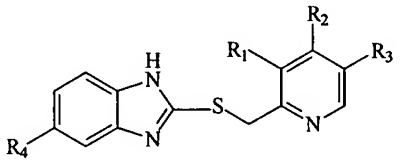
21. (original) A process according to claim 16, wherein the oxidation is performed in about 5% aqueous methanol.

22. (currently amended) A process for preparing a thioester compound of formula A:



A

wherein R_1, R_2, and R_4 are each selected from the group consisting of hydrogen, substituted or unsubstituted lower alkyl and substituted lower alkoxy; and R_3 is selected from the group consisting of hydrogen and substituted or unsubstituted lower alkyl, comprising reacting a thioether compound of formula B:



B

wherein R_1 through R_4 are as in formula A, with OXONE® to produce selective oxidation of the thioether compound of formula B to form the thioester compound of formula A,

wherein the oxidation is performed in a two-phase system selected from ~~(CH_2Cl_2/H_2O)~~ CH_2Cl_2/H_2O and ~~(ethyl acetate/H_2O)~~ ethyl acetate/H_2O.

23. (previously presented) The process of claim 22, wherein the oxidation is performed in the presence of a phase-transfer catalyst.

24. (previously presented) The process of claim 23, wherein the phase-transfer catalyst is tert-butyl ammonium bromide.

25. (currently amended) Omeprazole prepared with a process according to any one of claims 1, 4, ~~or~~ 8 and 16, wherein R_1 is methyl, R_2 is methoxy, R_3 is methyl, and R_4 is methoxy, wherein the omeprazole ~~has~~ contains a sulfone-by-product at a level of less than about 4.5% ~~of a sulfone by product~~.

26. (currently amended) Lansoprazole prepared with a process according to any one of claims 1, 5, ~~or~~ 8 and 16, wherein R_1 is methyl, R_2 is 2,2,2-trifluoroethoxy, R_3 is hydrogen, and R_4 is hydrogen, wherein the lansoprazole contains a sulfone-by-product at a level of ~~has~~ less than about 4.5% ~~of a sulfone by product~~.

27. (currently amended) Pantoprazole prepared with a process according to any one of claims 1, 6, ~~or~~ 8 and 16, wherein R_1 is methoxy, R_2 is methoxy, R_3 is hydrogen, and R_4 is difluoromethoxy, wherein the pantoprazole contains a sulfone-by-product at a level of ~~has~~ less than about 4.5% ~~of a sulfone by product~~.

28. (currently amended) Rabeprazole prepared with a process according to any one of claims 1, 7, ~~or~~ 8 and 16, wherein R_1 is methyl, R_2 is $MeOCH_2CH_2CH_2O$, R_3 is hydrogen, and R_4 is hydrogen, wherein the rabeprazole contains a sulfone-by-product at a level of ~~has~~ less than about 4.5% ~~of a sulfone by product~~.

29. (previously presented) The process according to claim 1, wherein the oxidizing agent is potassium peroxymonosulfate.

30. (previously presented) The process according to claim 29, wherein the molar ratio between potassium peroxymonosulfate and the compound of formula B is about 1.25-1.6 to about 1.

31. (previously presented) The process according to claim 29, wherein the molar ratio between potassium peroxymonosulfate and the compound of formula B is about 1.4 1.6 to about 1.

32. (previously presented) The process according to claim 29, wherein the oxidation is

performed in an aqueous solution.

33. (previously presented) The process according to claim 29, wherein the oxidation is performed in the presence of at least one solvent wherein the solvent is selected from the group consisting of acetone, methanol and a mixture thereof.

34. (previously presented) The process according to claim 29, wherein the oxidation is performed in about 5% aqueous methanol.

35. (currently amended) The process according to claim 29, wherein the oxidation is performed in a two-phase system selected from CH_2CI_2/H_2O and ethyl acetate/H_2O.

36. (previously presented) The process according to claim 29, wherein the oxidation is performed in the presence of a phase-transfer catalyst.

37. (previously presented) The process according to claim 36, wherein the phase transfer catalyst is tert-butyl ammonium bromide.

38. (previously presented) The process according to claim 29, wherein the oxidation is performed at a temperature between about -10°C to about 30°C.

39. (previously presented) The process according to claim 29, wherein the oxidation is performed over a time period of about 2 to about 10 hours.

40. (previously presented) The process according to 14, wherein the organic solvent is toluene.

41. (previously presented) The process according to 14, wherein the organic solvent is isopropanol.

42. (previously presented) The process according to claim 1, wherein the oxidation is performed at a temperature between about -10°C to about 30°C.

43. (previously presented) The process according to claim 1, wherein the oxidation is performed over a time period of about 2 to about 10 hours.

44. (previously presented) The process according to claim 16, wherein the oxidation is performed at a temperature between about -10°C to about 30°C.

45. (previously presented) The process according to claim 16, wherein the oxidation is performed over a time period of about 2 to about 10 hours.

46. (currently amended) The process according to claim 14, wherein the oxidation is performed at a temperature between about -10°C to about 30°C.

47. (currently amended) The process according to claim 14, wherein the oxidation is performed over a ~~timer~~ period of about 2 to about 10 hours.

48. (previously presented) The process according to claim 1, wherein the tert-butyl hydroperoxide is dry.

49. (previously presented) The process according to claim 1, wherein the tert-butyl hydroperoxide is aqueous.

50. (currently amended) The process according to claim 1, wherein the oxidizing agent is tert-butyl hydroperoxide in the presence of the catalyst, the thioester compound of formula A produced by the oxidizing agent ~~of tert-butyl hydroperoxide has~~ having less than about 4.5% of a sulfone by-product.

51. (currently amended) The process according to claim 1, wherein the oxidizing agent is OXONE® or potassium peroxymonosulfate, the thioester compound of formula A produced by the oxidizing agent ~~of OXONE® or potassium peroxymonosulfate has~~ having less than about 0.5% of a sulfone by-product.

52. (currently amended) The process according to claim 1, wherein the oxidizing agent is OXONE® or potassium peroxymonosulfate, the thioester compound of formula A produced by the oxidizing agent ~~of OXONE® or potassium peroxymonosulfate has~~ having less than about 0.2% of a sulfone by-product.

53. (currently amended) Omeprazole prepared with a process according to any one of claims 1, 4, 16 ~~or~~ and 29, the omeprazole containing a sulfone by-product, wherein the omeprazole contains less than about 0.5% of ~~a~~ the sulfone by-product.

54. (currently amended) Lansoprazole prepared with a process according to any one of claims 1, 5, 16 ~~or~~ and 29, the lansoprazole containing a sulfone by-product, wherein the lansoprazole contains less than about 0.5% of ~~a~~ the sulfone by-product.

55. (currently amended) Pantoprazole prepared with a process according to any one of claims 1, 6, 16 ~~or~~ and 29, the pantoprazole containing a sulfone by-product, wherein the pantoprazole contains less than about 0.5% of ~~a~~ the sulfone by-product.

56. (currently amended) Rabeprazole prepared with a process according to any one of claims 1, 7, 16 ~~or~~ and 29, the rabeprazole containing a sulfone by-product, wherein the rabeprazole contains less than about 0.5% of ~~a~~ the sulfone by-product.

57. (currently amended) Omeprazole prepared with a process according to any one of claims 1, 4, 16 ~~or~~ and 29, the omeprazole containing a sulfone by-product, wherein the omeprazole contains less than about 0.2% of ~~a~~ the sulfone by-product.

58. (currently amended) Lansoprazole prepared with a process according to any one of claims 1, 5, 16 ~~or~~ and 29, the lansoprazole containing a sulfone by-product, wherein the lansoprazole contains less than about 0.2% of ~~a~~ the sulfone by-product.

59. (currently amended) Pantoprazole prepared with a process according to any one of claims 1, 6, 16 ~~or~~ and 29, the pantoprazole containing a sulfone by-product, wherein the pantoprazole contains less than about 0.2% of ~~a~~ the sulfone by-product.

60. (currently amended) Rabeprazole prepared with a process according to any one of claims 1, 7, 16 ~~or~~ and 29, the rabeprazole containing a sulfone by-product, wherein the rabeprazole contains less than about 0.2% of ~~a~~ the sulfone by-product.

61. (currently amended) A pharmaceutical composition comprising omeprazole containing a sulfone by-product, wherein the omeprazole contains less than about 4.5% of ~~a~~ the sulfone by-product.

62. (currently amended) A pharmaceutical composition comprising lansoprazole containing a sulfone by-product, wherein the lansoprazole contains less than about 4.5% of ~~a~~ the sulfone by-product.

63. (currently amended) A pharmaceutical composition comprising pantoprazole containing a sulfone by-product, wherein the pantoprazole contains less than about 4.5% of ~~a~~ the sulfone by-product.

64. (currently amended) A pharmaceutical composition comprising rabeprazole containing a sulfone by-product, wherein the raberprazole contains less than about 4.5% of ~~a~~ the sulfone by-product.